

Dr. Collins further concluded that any competitor could construct a network while successfully and economically making use of unbundled network elements at the stipulated rates. He believes that it would be possible for any market entrant to develop a network under the stipulated rates. He does not believe that anything in the settlement will hamper a competitor's ability to enter the competitive marketplace in Oklahoma.

C. AT&T's Evidence and Testimony

1. Jon Zubkus

Mr. Zubkus is currently employed by AT&T as a Manager in the Local Infrastructure and Access Management Group. His business address is 919 Congress Avenue Suite 900, Austin, Texas 78701.

Mr. Zubkus previously worked for Southwestern Bell Telephone Company ("Southwestern Bell" or "SWBT") for 30 years in a variety of positions. He was involved in various network cost study functions; and, as District Manager-Cost Studies, he was responsible for developing incremental cost studies for various telecommunications services and unbundled telecommunications elements. The unbundled element studies included items such as loops, switching, interoffice and interexchange facilities, while the studies for services included Private Line, Long Distance, WATS, Data, Local Service and Access Service Cost Studies.

Mr. Zubkus's responsibilities included procedural development and implementation of these studies. Between November 1995 and January 1997 he was employed by Cathey, Hutton & Associates ("CHA") and had various regulatory responsibilities for the firm, including the development of incremental cost studies. Since January 1997, he has been employed by AT&T.

Mr. Zubkus testified before this regulatory body while employed by Southwestern Bell Telephone Company. He has also testified before the State Regulatory Commissions of Missouri, Kansas, Texas, Arizona and Arkansas.

Mr. Zubkus's current responsibilities at AT&T include the review and analysis of cost studies presented by local exchange companies in support of their resale discounts and the pricing of their Unbundled Network Elements.

Mr. Zubkus reviewed and evaluated the cost studies for unbundled loops submitted by SWBT in this docket to determine whether those studies comply with the LRIC principles established in OAC 165:55-1-4. He found there are a number of instances where SWBT's studies do not comply with these LRIC principles. His testimony offered corrections he has found are necessary to make those studies comply as closely as possible with LRIC. In addition, Mr. Zubkus has rerun the SWBT Cost Studies utilizing the changes that he recommended. The results of rerunning the produces cost for unbundled loops which are much closer to the LRIC than the costs proposed by SWBT. His revisions to the SWBT cost studies are reflected in Attachment JAZ-1. This attachment shows what the costs proposed by SWBT would be for the various kinds of unbundled loops using my revised cost calculations.

A fundamental tenant of the Oklahoma Rule is the non-discriminatory requirement -- the cost to provide new entrants must be no higher than the cost that SWBT incurs where it provides that service to itself. SWBT's loop cost studies fail this fundamental tenant on both a factual and theoretical basis as seen by comparing the SWBT cost estimates with several SWBT end user service prices that SWBT claims fully recover SWBT's LRIC of providing that service.

For example, SWBT's current tariff in Oklahoma for a Centrex II Service Primary Location Exchange Access Line is \$11.28. This rate applies on a statewide basis and includes switching and intercom as well as a loop. These rates do, by SWBT's own admission, fully recover LRIC. SWBT now, claims that the LRIC for a loop in the most populated service area is \$17.44, or 155% higher than their rate for loop, switching and intercom.

Mr. Zubkus explained why the actual lengths of the sampled loops should be used to calculate loop costs. SWBT'S loop cost model, Loopvst, does not determine cost based upon actual loop lengths, but instead assumes that all loops have lengths equal to even thousand foot lengths calculating instead a theoretical loop length and associated cost.

SWBT used a fill factor in its loop cost studies that assumes that SWBT's distribution plant is about 70% unused today and is expected to remain unused for the entire life of the plant. In order to recover the cost of the unused plant, the loop cost study adds the costs for this unused plant to the costs of loops used by the existing customers. This means that each loop charge actually covers the cost of three and one-third loops. A competitive telecommunications firm cannot operate at such a low level of capacity. Over the long run, SWBT will become much more efficient than is today. That improved efficiency will result in higher levels of distribution fill. A level of 50% unused distribution plant is a reasonable approximation of the fill that SWBT will experience in the future.

There are at least two problems with the feeder portions of SWBT's unbundled cost studies. First, SWBT assumed inefficient placement of feeder cables by not sizing these cables to serve all of the demand along a given route. Second, SWBT assumed higher costs than an efficient firm would encounter for the termination of feeder cables. These failings inflate the cost estimates for feeder above an accurate estimate of LRIC.

SWBT has admitted that it tapers its feeder cable in this manner. Moreover, SWBT has admitted that it is more efficient to taper feeder cable. Thus, SWBT's loop studies do not conform to the manner in which SWBT configures its network and also does not conform to how such a network would be configured in a forward-looking least cost environment. Therefore, the studies do not comply with LRIC.

As Mr. William Deere explained on page 14 of his direct testimony, the feeder distribution interface (FDI) is the cross-connect box connecting feeder cable to distribution cable. Mr. Deere has also testified on page 13 of his direct testimony that approximately 25% of the loops in Oklahoma are configured without an FDI, thus distribution cable is directly hardwired to feeder cable

facilities. Mr. Deere also testified that this situation is not likely to change.

However, in conflict with Mr. Deere's testimony, SWBT studied the cost of feeder by assuming that the feeder portion of every loop ends in an actual FDI where it then connects to distribution plant. As stated above, the assumption that every feeder loop terminates on an FDI is wrong. SWBT's assumption of an FDI termination adds inefficient amounts of additional investment to the underlying cost estimates, contrary to the requirement that the cost estimates reflect efficient design.

Mr. Zubkus made two modifications to SWBT's cost studies to account for these deficiencies. First, to be consistent with Mr. Deere's Testimony and account for the 25% overstatement of FDI investment, he adjusted the FDI investment by eliminating 25% of the investment. The remaining 75% of the investment is consistent with Mr. Deere's Testimony. Second, since 25% of the distribution plant facilities are directly hardwired to feeder plant, he made an adjustment to the distribution investment cost calculations. With distribution facilities directly wired to feeder facilities, they appear as a single facility as they are indistinguishable from feeder facilities. Accordingly, the investments for each should be consistent. To account for this situation Mr. Zubkus utilized the same investment figures for both feeder and distribution facilities.

SWBT assumed that all 2-wire 8db loops would use a premise termination that is capable of handling only one or two loop terminations. The effect of SWBT's assumption is to raise still further the costs estimated for an unbundled 2-wire 8db loop, the kind of loop that, if it were priced according to accurate estimates of LRIC, would be the kind of unbundled loop most often used by entrants.

Two-wire loops can terminate at premises that use many lines, not just at premises that use only one or two. Assuming that two-wire loops only terminate on Network Interface Devices (NIDs) designed to terminate only one or two lines overstates the average cost of NIDs for all two-wire circuits.

The correct way to model NID costs for 2-wire, 8db loops and distribution subloops is to use a weighted average of the two kinds of terminations. Consequently, my modification is based on my estimate of the relative proportion of 2-wire, 8db lines that terminate on multiline NIDs and the relative proportion that terminate on NIDs designed to terminate only one or two lines.

Mr. Zubkus also made an adjustment to the digital loop electronics contained in SWBT's study. There are two types of digital loop electronics utilized in SWBT's cost study, an Integrated Unit and a Universal Unit. SWBT's cost study used a mixture of these two of units. The Universal unit is not forward-looking and is more expensive to install and maintain when compared to the Integrated unit. Consequently, to be consistent with LRIC principles of forward-looking and least cost, Mr. Zubkus used only the Integrated unit in my study modifications.

SWBT also should have made modifications to their outside plant supporting structure factors for conduit and poles to account for leased space to others. SWBT poles and conduit are not solely used to support SWBT's loop plant. These structures are also leased directly to other vendors such as CATV companies. By not considering the total future demand for poles and conduit, the costs estimated for these items violate LRIC principles. In addition, revenues are already being received for supporting structures. Thus, including the total costs of poles and conduit in the unbundled loop cost study and ignoring the revenues being received for vendor use over states the loop costs.

Mr. Zubkus could not correct all of the defects in the SWBT loop cost studies. Because of this inability to correct all the defects, his estimates are still above what accurate LRIC cost estimates would be.

Mr. Zubkis presented a Dark Fiber Cost Study. Using SWBT Oklahoma a per foot cost for fiber was determined. The results are shown on Attachment JAZ-1.

Finally, Mr. Zubkus reviewed the portion of the rates contained in the proposed settlement between SWBT, Cox Communications and Commission Staff relating to Loops (the "Proposed Settlement Rates"). The proposed settlement rates do not represent cost based rates which satisfy either the Oklahoma costing rules (OAC 165:55-17-25 and OAC 165:55-17-27) or the relevant provisions of the Telecommunications Act of 1996. The proposed settlement rates do not incorporate all of the changes which are necessary in order to render SWBT's cost studies compliant with the Act and the Oklahoma costing rules as outlined in his testimony. Indeed, the proposed settlement rates do not even incorporate or represent the changes and recommendations of Staff consultants and, therefore, cannot be cost-based in my opinion even based upon the recommendations of Staff's own consultant. The Commission should not adopt these rates.

Summary of Cross-Examination of Jon Zubkus

On cross-examination by SWBT, Mr. Zubkus stated that the fill factor for distribution is the most significant of his proposed adjustments to SWBT's cost studies. Nevertheless, of the lengthy and voluminous loop study document he prepared, he devoted only one page to fill factor adjustments for each of the three geographical rate zones.

Mr. Zubkus adjusted SWBT's fill factor to reflect a 50% factor for distribution cable. He conceded that there is no supporting documentation supporting that adjustment and that he arrived at the adjustment more or less from his own experience. The adjustment was not based on any historical averaging of fill factor over time. He further confirmed that the fill factors that he is disputing are the actual fill factors existing for SWBT in its network today.

Mr. Zubkus was next referred to his statement that no competitor can or does operate at the low fill factor level used in SWBT's cost studies. He could not point to any specific competitor that was operating at any higher fill factor than SWBT and had no idea of the fill factor at which AT&T operates. He could point to no competitor for reference to the potential fill factor that could be effectively achieved on a local loop.

Mr. Zubkus assumes that there will be an increase in fill factors over time from that current factor experienced by SWBT. Nevertheless, he also assumes that there would be static growth of existing SWBT facilities and that no population displacement for existing facilities would occur during the same period. He assumes that if population displacement does occur then facilities would be retired and would not remain part of the base. He did concede that as long as there were two or three customers using a facility, that the facility could not be retired. He also conceded that as the population moves between inner city and suburbia, that the fills could be accordingly affected. He conceded that "things are growing, things are dynamic." When asked about the risk to AT&T that its projection of a 50% fill factor is wrong he responded that "naturally Southwestern Bell has a risk."

Mr. Zubkus was unable to state the number of UNE loops AT&T is planning on ordering during the contract period, even assuming that the rate levels were as AT&T was proposing.

SWBT next questioned Mr. Zubkus concerning his proposed adjustment to remove 25% of the Feeder Distribution Interface (FDI) investment from SWBT's cost studies. He based this percentage on Mr. Deere's testimony that currently 25% of the loops are configured without an FDI. Although he relies on Mr. Deere's testimony that this actual percentage will remain the same in the future, he declined to rely on the companion testimony of Mr. Deere and Mr. Moore that the current actual fill factor for distribution cable will also remain the same in the future.

SWBT next questioned Mr. Zubkus concerning his adjustment of 25% of the distribution cable to look like feeder cable. Mr. Zubkus agreed that feeder cable is larger and more expensive and experiences a higher fill rate than distribution cable. As a result, his adjustments would lower the cost of SWBT's loops.

At first, Mr. Zubkus stated that this adjustment was based on Mr. Deere's testimony that where there is no FDI, there is "one continuous cable" between the central office and the NID at a customer's house or place of business. However, he later admitted that Mr. Deere referred to hard splices between feeder and distribution cable, where the cables are simply spliced together on a permanent basis. He also admitted that there could also be a taper point at these hard splices.

Mr. Zubkus next testified concerning his adjustment to add more multi-line NIDs. He admitted that he had nothing to base this adjustment on, no history and no experience. He simply assumed that 50% of the customers would be multi-line customers. He could not state how many multi-line NIDs AT&T would plan on ordering. He further admitted that AT&T did not give him any projections for multi-line NIDs on the SWBT network, nor did he have any other secondary source to consult.

Finally, Mr. Zubkus was unable to effectively enunciate his position concerning his adjustment to Integrated Digital Line Carrier (IDLC), although he did explain that he proposed 100% IDLC because it is a more efficient forward looking technology that will result in cost savings. Mr. Zubkus explained that

he began with SWBT's cost numbers indicating that in the future it expects 25% of its loops to be fiber. In those cases where fiber loops were assumed and digital loop carrier was involved, SWBT shows 25% of those loops to be IDLC and 75% to be Universal Digital Loop Carrier (UDLC) with a central office termination. Mr. Zubkus explained that he adjusted SWBT's numbers to change all digital loop carrier to IDLC and eliminated the UDLC central office termination. Accordingly, he provided for no UDLC in the network. He admitted that converting the UDLC to IDLC involves a cost, but he was not able to explain how or if that cost was included in the AT&T studies. He did state that a move from UDLC to IDLC would result in a cost savings.

2. Robert P. Flappan

Mr. Flappan explained that the prices for unbundled network elements (UNEs) and interconnection services presented by SWBT do not comply with the applicable state and federal requirements. SWBT's philosophy that prices should reflect "actual" cost, as opposed to long run incremental (LRIC) is directly at odds with the very essence of the Oklahoma pricing rules and the Telecommunications Act of 1996 (Act).

SWBT's prices assume that current levels of utilization and efficiency are as good as they can or will get. Prices based on true LRIC should recognize increasing levels of utilization and increasing efficiency that will come about due to increasing competitive pressures.

Mr. Flappan also presented the UNE and interconnection prices proposed by AT&T in this proceeding, which are derived from making the necessary changes to SWBT's cost studies to bring them into compliance with the applicable state and federal laws.

There are three provisions in Section 165:55 of the Oklahoma Administrative Code (OAC) which directly apply to this proceeding. These are the section 165:55-17-25 (OAC 17-25) Costing Standards, the 165:55-1-4 Definitions section that defines long run incremental cost (LRIC) and the section 165:55-17-27 (OAC 17-27) provisions that define just and reasonable prices for network elements and interconnection of facilities. The latter mirrors the language contained in Section 252 (d) (1) of the Act, Pricing Standards for Interconnection and Network Element Charges.

The Oklahoma definition of LRIC is the one of the three which most clearly shows why SWBT's prices do not conform with prevailing law. The definition states that in a LRIC study all inputs are variable, and all technology and all deployment must be efficient. SWBT's studies fail to recognize the gains in efficiency that SWBT is making and will surely continue to make over the long run time frame.

SWBT's filed cost studies do not meet the statutory definition of LRIC because they assume investment, network placement, fill factors and expense ratios to be fixed at today's levels. AT&T's adjustments to SWBT's studies correct for these deficiencies and bring the studies into conformance with the statutory definition.

OAC 17-27 states that rates for UNEs and interconnection services shall be cost based, set without reference to a rate base or rate-of-return proceeding and shall be nondiscriminatory. This tells us that we should not use SWBT's historical costs to determine rates for UNEs because those historical costs reflect rate-of-return proceedings. This section also tells us that the Commission should not set rates for UNEs based upon historical fill factors or historical network configuration.

The non-discriminatory provision of OAC 17-27 tells us that AT&T must be able to obtain interconnection and network elements at the same rates, and under the same terms and conditions which SWBT provides such elements or services to itself in the long run. If the rates, terms, and conditions offered to competitors are less favorable, then the non-discriminatory pricing rule is violated. This provision also means that SWBT cannot base its prices to competitors on a provisioning scheme that is different from how it provisions those services to itself.

Non-recurring charges (NRCs) should also meet the standards of the LRIC definition in OAC 165:55-1-4, OAC 17-25 and the OAC 17-27 pricing rules for interconnection and network element prices. NRCs must be non-discriminatory and must be based on long run, forward looking, efficiently deployed technology.

NRCs are important because they are, in effect, tickets to get into the market. Because NRCs are imposed when change occurs, they fundamentally protect the status quo. Each NRC can discourage a rival from entering altogether or can discourage a customer from using another provider's services. The NRCs applicable to transactional activities must reflect the use of non-discriminatory systems that provide entrants the same access and use of the local network that SWBT provides itself.

Every carrier will incur costs so that the industry changes envisioned by the Federal Act become a reality. The fact that SWBT's network monopoly provides it the opportunity to impose its costs on others does not mean that it should be permitted to do so. One-time "development" or "compliance" costs are internal to each industry participant and SWBT should not be allowed to include them in its charges to other carriers. Moreover, these compliance costs are not attributable to any particular carriers' request for service, but stem instead from the Act's mandate that local exchange markets should be open to competition. Congress frequently enacts statutes that impose costs on those who must comply. In this regard, there is nothing unusual about the costs caused by the Federal Act. In addition, the Commission should expect that the new operational systems and other changes implemented by SWBT to comply with the Act will also benefit SWBT's own retail services. SWBT is essentially a "purchaser" of network elements when it provides retail service, and upgrading its systems may improve the efficiency of its operations as well. Compliance with the Act cannot become an excuse for SWBT to modernize its systems with its competitors picking up the tab.

AT&T and SWBT already have an approved interconnection agreement that allows AT&T to order combinations of UNEs from SWBT. The contract requires SWBT to provide such combinations. In setting prices for UNEs and interconnection services, this issue should not be reopened. SWBT's prices should be based on

its provisioning of combinations of elements as contemplated in the approved agreement.

SWBT's studies inappropriately reflect a growth in lines which would raise the price of a minute of switching, without reflecting a growth in minutes which would lower the price of a minute of switching. Whenever prices are derived from non-traffic sensitive costs which are spread over a number of minutes of use, if the number of minutes grows, the price per unit declines. If growth is going to be recognized in switching lines, it should be recognized across the board in all SWBT's studies and for all elements. Since all other SWBT studies do not recognize growth, the local switching study should not deviate from this standard approach.

There is no competitive market for unbundled network elements. Obviously, if there were such a market, there would be no need for many of the competitive safeguards in the Act and the regulations of the OAC. Thus, because SWBT is not significantly constrained by competitive market forces, it is critical that the Commission exercise its authority under the OAC and impose LRIC prices for unbundled network elements and interconnection services based upon forward-looking, efficient technologies and deployment. If the Commission were to recognize SWBT's actual embedded costs as the basis for prices, the resulting prices would violate the non-discriminatory requirements of state and federal law because they would provide monopoly profits to SWBT while competitors would not be privy to these same monopoly profits.

In order to foster meaningful competition in this state, not just by AT&T, but by other new entrants as well, the Commission must establish a mechanism by which the full costs of offering service are known by all. In order to achieve this objective, the Commission should in this proceeding expressly determine and adopt a final and exclusive set of rates and charges and order that such rates and charges will apply to AT&T's UNE purchases for the life of this contract. As a final, yet important, step the order should explicitly state that the UNE price schedule is complete and neither party may add to, subtract from or change any of the prices without agreement of the other party.

Mr. Flappan also addressed the issue of pricing customized routing and performance data on an individual case basis (ICB) rather than having cost-based rates set in this docket. Mr. Flappan explained why ICB rates are inappropriate and why ICB rates unnecessarily increase the costs and risks of new entrants who might want to enter local markets in Oklahoma and would be counter to the best interest of Oklahoma citizens.

Mr. Flappan explained that his concerns about ICB pricing for customized routing go to the heart of the difference between AT&T's position and SWBT's position on this issue. AT&T defines customized routing via the Advanced Intelligent Network (AIN) platform as the software changes necessary in the switch to direct traffic from a switch to a particular facility, such as AT&T's OS/DA platform. Implementing customized routing under this definition requires building a database into the switch software that would control the flow of traffic according to a pre-specified set of conditions. One database is built for each switch type which can then be applied to all of those switch types in a particular state. Since there are only a few switch types in Oklahoma (SE and

DMS100), the problems with developing uniform cost based rates for customized routing do not exist.

SWBT's definition of customized routing is vastly different from AT&T's definition. SWBT defines customized routing to include the actual transport facilities that carry traffic from one of SWBT's switches. SWBT says that customized routing must be ICB because there are a very large number of combinations of facilities and software changes that would possibly be requested. AT&T's position is that prices for these underlying facilities, such as DS-1 or DS-3 trunks, are being separately determined by the Commission and that there is no reason why permanent rates for customized routing should not be set in this docket.

In other states, SWBT previously produced and filed cost studies for customized routing which proves the point that ICB rates for customized routing are not necessary. ICB rates are only required when the costs to provide a service vary so significantly that the costs cannot be captured in a cost study. It follows then that, if the costs of a particular service can be captured in a cost study, ICB rates are neither appropriate nor necessary.

SWBT has deployed AIN technology in the five states in which it offers service, including Oklahoma. Thus, SWBT has already deployed the technology necessary to provide AIN customized routing in Oklahoma. Even though this technology has been deployed, SWBT has not provided a cost study for AIN customized routing.

The Commission should only permit ICB pricing when there is absolutely no alternative - when it is absolutely impossible to produce a cost study. As most people recognize, this docket presents an unusual situation whereby SWBT (which currently has huge monopoly power in Oklahoma) is able to propose the costs that its potential competitors will incur. Obviously, SWBT has a huge incentive to overstate and inflate its competitor's costs because, by doing so, SWBT can maintain its monopoly power. This problem is compounded when SWBT is permitted to engage in ICB pricing which provides SWBT with a future opportunity to shut down or forestall competitive entry by proposing unreasonable prices in response to a request for customized routing. Quite simply, if SWBT is permitted to engage in ICB pricing, it will propose outrageously high prices leaving CLECs in the quandary of either paying those prices (significantly increasing its costs while at the same time providing SWBT with a windfall) or not offering the services. Indeed, SWBT has previously demonstrated its propensity to use ICB-type pricing to preclude competition. In another jurisdiction, SWBT initially proposed a price of more than \$300 million to provide customized routing, while the Commission in that state ordered a price of \$114 million.. Another example of SWBT's behavior in an ICB situation is in the area of collocation. In another jurisdiction, when SWBT had ICB authority prior to the Commission in that state establishing permanent rates, SWBT proposed to charge over \$500,000 for a given collocation arrangement. When the Commission set cost based rates, the price of the collocation arrangement was set at approximately \$100,000.

The only way to defuse this situation and preclude a future bottleneck between SWBT and CLECs is for this Commission to reduce ICB pricing to the bare minimum. It is only through the Commission's regulatory oversight that SWBT can

be made to offer just and reasonable prices to competitors for bottleneck facilities. ICB pricing will lead to slow, arduous and tedious price arbitration in the future.

AT&T, and all other CLECs, must be able to determine what its costs will be as it makes plans to enter local markets in Oklahoma. ICB pricing introduces pricing as well as timing uncertainty into AT&T's market entry plans. AT&T's entry plans could be delayed while the future price determination is being arbitrated by the Commission. In the future when AT&T will actually order customized routing from SWBT, SWBT will have no greater incentive to provide AT&T with cost based prices than it has today. In fact, if SWBT has already been allowed into the interLATA market at that time, SWBT will have no incentive to provide a just and reasonable price to AT&T. SWBT will also have no incentive to quickly resolve the question of what the price should be.

The higher the level of uncertainty facing AT&T, the less likely will AT&T be to quickly enter local markets and provide choices to Oklahoma consumers. Only when consumers have true choices will the market bring lower prices, higher quality and greater innovations.

The Commission must make it perfectly clear that customized routing does not involve the underlying facilities for which the Commission has already established arbitrated prices. Furthermore, once the facilities have been defined as being outside the scope of customized routing, since there are only a few switch types in SWBT's network, it becomes a routine costing exercise to establish a firm price for the software changes necessary to implement customized routing. Customized routing need not and should not be ICB priced. The Commission should order SWBT to file a cost study and establish permanent prices for customized routing.

ICB pricing for performance data is also not appropriate. SWBT has already agreed to provide a set of performance data in Attachment 17 of the Interconnection Agreement in Texas, Missouri, and Kansas for no charge, except for the prices AT&T is paying for the services or elements themselves. SWBT should be consistent and provide this data at no additional charge in OK also. Should AT&T subsequently request performance data which goes beyond the standard agreed upon set of data, this should be handled through the special request process.

AT&T should not be faced with the prospect of trying to enter the local market in Oklahoma without knowing how much it will cost to obtain performance data from SWBT. This merely serves to increase the risks to AT&T of entering the market, and makes it less likely that Oklahomans will soon have rivals vying for their local service business.

Finally, Mr. Flappan testified that he had reviewed the rates which are being proposed in the settlement by and between SWBT, Cox Communications and Commission Staff (the "Proposed Settlement Rates"). The AT&T cost witnesses have explained why and how the proposed settlement rates are not cost-based and do not comply with the relevant provisions of the Oklahoma Costing Rules (OAC 165:55-17-25 and OAC 165:55-17-27) and the Telecommunications Act of 1996 and, therefore, these rates should be rejected. There are two other matters with respect to the

proposed settlement rates that should be brought to the Commission's attention. First, there are no cost studies or revisions to cost studies to support these rates. Second, the proposed settlement rates are arbitrary. All that Cox, SWBT and Commission Staff did in establishing these rates is "split the difference" between the AT&T proposed rate and the SWBT proposed rate (with the exception of loop), take one-third off of the SWBT proposed NRC and eliminate almost all cross-connect rates. This arbitrary manner of picking rates "out of the air" does not comply with the cost-based standards applicable in these dockets. Finally, the proposed stipulation contains a large number of items for which ICB pricing is proposed which suffer from the same defects discussed above.

Summary of Cross-Examination of Robert P. Flappan

On cross-examination, SWBT questioned Mr. Flappan concerning references in his educational background purporting to qualify him as an expert in economics. In his prepared testimony, Mr. Flappan stated that he had undertaken an extensive number of economic courses in his degree programs and studied numerous books, articles, testimony, testimony attachments and other documents relating to pricing and costing.

Despite these claims, SWBT's cross-examination revealed that although he had taken some economics courses in connection with his bachelors and masters degrees in business administration, he had not entered any degree program with respect to economics. Mr. Flappan admitted that he had no experience in pricing and costing for local exchange carriers. His training included a two-week intensive AT&T course on accounting and costing for incumbent monopoly local exchange carriers. When asked about the "numerous books" he had studied, he could only remember three and for one of the three he could not remember the author. Mr. Flappan has never submitted anything for publication to economic journals, has never been a referee or technical advisor to any economic journal, has never been a member of any editorial board for any economic journal, has never received any award for study or contribution in the field of economics, has not taught any courses in the field of economics and has never been a member of any economic association.

Mr. Flappan conceded that AT&T does employ at least one professional economist on its staff. He also conceded that there was no way for the Commission to determine from the record whether his "discussions" with economic experts satisfactorily covered any particular aspect of the field of economics. Nevertheless, Mr. Flappan insisted that the AT&T cost studies satisfied long-run economic principles but that SWBT's do not.

Although he criticized SWBT for its use of actual data in its long-run incremental cost studies, Mr. Flappan conceded that AT&T used at least some actual data in its own studies. When asked about the assumptions in the AT&T cost studies concerning the use of a network that is more efficient than SWBT's existing network, he conceded that changes for efficiency improvements do not come cost-free. Nevertheless, neither SWBT nor AT&T has included these costs in their LRIC studies; Mr. Flappan insisted historical or booked costs should not be included in a LRIC study. He stated that a company operating in a market where a competitor offers its product at a lower price because of the

competitor's lower costs does "not have the luxury" of attempting to recover its historical or booked costs in its pricing structure.

Mr. Flappan conceded that AT&T made adjustments to SWBT's cost studies which resulted in dramatically different costs. Nevertheless, he insisted that the network which AT&T presumed in its cost studies is no different from the current network of SWBT.

He insisted that the adjustments to SWBT's cost studies are necessary to reflect a more efficient service than is presently available. AT&T adjusts SWBT's current cost studies to increase the level of technology. However, when AT&T places an order for an unbundled network element (UNE), he conceded that AT&T would most likely get the level of efficiency present in SWBT's network today, rather than a higher level of efficiency presumed in the AT&T cost studies. If SWBT could not achieve the higher level of efficiency, AT&T would take the system as actually provided.

Mr. Flappan denied that the dramatic difference between AT&T's projected cost for SWBT's network and SWBT's actual costs raised any questions about the validity of AT&T's projections. He insisted that the proposed costs and proposed rates should not have any relevance to SWBT's actual costs.

Although AT&T takes the position that the costs for an efficient network are dramatically below SWBT's actual costs, Mr. Flappan offered several explanations as to why AT&T could not build its own network in Oklahoma today, including the fact that SWBT has enjoyed a monopoly in Oklahoma for 100 years, that SWBT has embedded facilities across the entire state, that SWBT has call volumes and enjoys economies of scale which AT&T cannot replicate, that given SWBT's monopoly and economies of scale, it could match AT&T's rate, and the fact that it would cost millions of dollars to replicate SWBT's network.

3. John C. Klick

Mr. Klick is the founder of Klick, Kent & Allen, Inc. AT&T Communications of the Southwest, Inc. ("AT&T") retained Klick, Kent & Allen to: (1) summarize the major deficiencies that AT&T experts identified in the cost studies presented by Southwestern Bell ("SWBT") and (2) critique a number of miscellaneous SWBT cost studies.⁴

In order to comply with the long-run incremental cost ("LRIC") standards of this Commission, cost studies submitted should (1) be forward-looking; (2) reflect the long run; (3) be incremental; (4) incorporate least-cost technologies; and (5) reflect cost-causation. The cost studies submitted by SWBT

⁴ In Cause PUD 97-213, those studies include LSP to SS7 STP DS0 and DS1, SS7 Transport, STP Port, LIDB Query, LIDB SMS, CNAM Query, Toll Free Calling Query, Directory Assistance, Operator Services Cost Model (OSCM), Operator Work Seconds, Local and IntraLATA Operator Assistance, Call Branding and Operational Support System (OSS). In Cause PUD 97-422, those studies also include Directory Assistance Call Completion, E911, White Pages, Directory Assistance Listing and LSP Emergency Contact for Non-published Service.

did not meet these basic LRIC principles. SWBT incorporated inappropriate assumptions into their cost studies and applied costs to inappropriate elements, thereby violating the principle of cost causation, and based their costs on embedded, historical data, thereby violating the principle that the cost studies should be forward-looking.

Mr. Klick has summarized the analyses conducted by other AT&T experts.⁵ He concluded that the SWBT cost studies require substantive changes in order to conform to LRIC principles. He identified where the SWBT cost studies contained both conceptual errors and errors in implementation, resulting in overstated costs, and the corrections required to bring the SWBT cost methodologies into conformance with Commission principles.

Mr. Klick directly sponsored AT&T's recommended changes to certain studies. All of the SWBT signaling cost studies rely upon output from the Common Channel Signaling Cost Information System (CCSCIS) model. In order for those studies to conform to LRIC principles, the input to CCSCIS version 4.2 (used to determine investments for STPs and links) should be corrected two ways. First, the utilization factor should be set to 1.0. This change yields an optimal utilization of 40% for each STP pair, or a utilization of 80% if one STP-fails. A 40% utilization per STP is standard engineering and is recommended by Bellcore. Second, the investment values used by SWBT are for medium-sized STPs, converted to large STP configurations, an approach more expensive than purchasing a large configuration. However, because of a lack of investment information, the AT&T cost studies incorporated the SWBT's investment values, even though it overstated costs. SWBT should be required to rerun its studies with the correct investment values.

Mr. Klick also identified that an input change was required to CCSCIS version 3.9 (used to determine investments for SCPs). The investment values used by SWBT do not reflect the declining trend in prices shown in the SCIS investment tables. To reflect a current SCP investment level, he extrapolated the downward trend to a 1996 time frame. When combined with the SWBT volume discount, an overall 40% discount resulted. These changes to the CCSCIS models were incorporated into the revised signaling cost studies -- LIDB Query, CNAM Query, Toll Free Calling Query, SS7 transport and STP port.

Mr. Klick also determined that the only change required to the unbundled LSP to SS7 STP DS0 and DS1 cost studies was to incorporate the cost factors corrected by Mr. Rhinehart into the ACES runs that develop investment.⁶

⁵ Mr. Klick summarized the following AT&T witnesses' testimony: Zubkus' analysis of the SWBT loop studies, Petzinger's analysis of local switching studies, Turner's analysis of transport studies, Lee's analysis of SWBT's economic lives and salvage values, Rhinehart's analysis of factors and common costs and Segura's analysis of non-recurring charges.

⁶ ACES converts investments into annual and monthly costs. AT&T's ACES runs all incorporate corrected factors.

Each of the Operator Services/Directory Assistance ("OS/DA") cost studies relies on output from the Operator Services Cost Model ("OSCM"). Mr. Klick corrected the OSCM to incorporate: (1) revised DMS-100 discounts, as described by AT&T switching expert Petzinger; (2) modified investments for urban DS0 and DS1 transport, as described by AT&T expert Turner; and (3) corrected "fill" factors for the MPX, ETMS, IVS and NAV computer systems. In conducting its cost studies, SWBT used actual utilization as "fill" factors in the computer systems included in the OSCM. Actual utilization is inappropriate because: (1) an efficient provider would not install significant excess capacity because computer expansion is relatively easy; (2) applying a fill factor on underutilized systems exponentially increases excess capacity; and (3) use of actual utilization violates the forwarding-looking requirements of LRIC. In correcting the SWBT utilization, Mr. Klick incorporated the administrative fill factors that SWBT provided for the computer systems. The "fill" factor issue on computer equipment also was incorporated into the revised Call Branding cost study - SWBT had again used actual utilization factors as fill factors. He corrected those factors by using the SWBT administrative fill.

Mr. Klick made two additional corrections to the OS/DA studies. First, he corrected labor rates; Mr. Rhinehart's testimony explains the problems inherent in SWBT's labor rate studies. Next, all costs associated with independent exchange carriers ("IECs") relations were excluded. An efficient provider would not incur these costs to provide OS/DA services to other independent exchange carriers unless the revenues generated would more than offset the costs. Because SWBT did not include any revenues from these services, the costs were excluded.

Mr. Klick's revised Operations Support Systems (OSS) cost study incorporated three corrections. He eliminated all computer systems costs (DATAGATE, OPTIVIEW, etc.) because they were already included by SWBT in the support assets factors. He eliminated labor hours because Mr. Rhinehart demonstrated that the labor hours associated with (a) remote access facility ongoing cost per port per month; (b) ongoing operational cost per month; and (c) the Helpdesk cost per month were already included in the support assets factor calculation or the common cost accounts. He also eliminated start-up costs because SWBT said it does not plan to charge CLECs for OSS development.

Mr. Klick identified the following necessary corrections to the LIDB Service Management System (SMS) cost study: (1) incorporation of the correct labor rates from Mr. Rhinehart; (2) elimination of inflation; and (3) elimination of certain equipment costs. The hardware costs for the LVAS and SLEUTH systems were eliminated to remove a SWBT double-count - they were already included within the SWBT support assets factor, as described by Mr. Rhinehart.

Mr. Klick identified two necessary corrections to the SWBT E911 cost studies: (1) revised labor rates (provided by Mr. Rhinehart); and (2) corrected equipment investments. SWBT used the Bellcore SCIS Intelligent Network (SCIS/IN) model to develop the E911 equipment investments. SCIS/IN incorporates output from the SCIS/MO model for its investments. Because SWBT used the wrong discounts in performing its local switching studies, it was necessary to rerun SCIS/IN to generate the investments for E911 that incorporated the correct

discounts.⁷ SWBT also included costs in its E911 cost studies that were already recovered from their customers, thus double recovering these costs. Specifically, SWBT included NRCs for performing trunk translations. When a customer switches to a new LSP, there is no additional work for SWBT to perform. The SWBT study attempted to recover the costs from the customer as part of their service fee, and again from new entrants.⁸

The SWBT white pages study developed costs by three zones: rural, suburban and urban. There is no logical basis why paper or printing costs should vary by geographical groupings within Oklahoma. Additionally, the cost for an information page should be the same for any directory in the state. Mr. Klick's restatement (1) used SWBT's costs but applied them on a per listing basis; (2) eliminated the management fee that SWBT proposed to pay to its own subsidiary; (3) eliminated the commission assessment because that is inappropriate on third party transactions; and (4) eliminated the proposed inflation factor.

The Directory Assistance Listing cost study required two corrections: (1) the use of any inflation factor was eliminated and (2) the exchange carrier relations costs were eliminated because each LSP would also incur these costs.

The LSP Emergency Contact for Non-Published Service cost study required three adjustments (1) revised labor rates from Mr. Rhinehart; (2) elimination of inflation; and (3) elimination of exchange carrier relation costs because each LSP would also incur these costs providing this service to SWBT.

There are two other matters with respect to the Proposed Settlement Rates that should be brought to the Commission's attention. First, there are no cost studies or revisions to cost studies to support these rates. Second, the Proposed Settlement Rates are arbitrary. All that Cox, SWBT and Commission Staff did in establishing these rates is "split the difference" between the AT&T proposed rate and the SWBT proposed rate (with the exception of loop), take one-third off of the SWBT proposed NRC and eliminate almost all cross-connect rates. This arbitrary manner of picking rates "out of the air" does not comply with the cost-based standards applicable in these dockets.

Summary of Cross-Examination of John C. Klick

On questioning by the ALJ, Mr. Klick defended his opinion that the settlement rates are not cost-based by saying that one should evaluate both the

⁷ In its E911 studies, SWBT used an older version of SCIS/IN with lower discounts than what it used in its local switching studies.

⁸ The E911 non-recurring charges that SWBT seeks to impose also creates a barrier to entry for potential new entrants. Based on its cost studies, this fee would be included when an LSP signs up its first customer and again each time the LSP expands its service area beyond the first E911 control point. While new entrants will be required to collect these special fees from end users, by law, they must be turned over to the agencies that respond to 911 calls.

inputs and the various assumptions in each of the cost models to decide item by item what is the appropriate input or assumption to be made for each separate issue. He stated that to arrive at proper cost-based rates, one should analyze and understand the inputs and assumptions presented by each party for each issue and decide which ones are appropriate. He conceded that the parties presented very different positions, but he thought that these positions could be evaluated as part of the decision process.

On cross-examination by SWBT, Mr. Klick restated his position saying that to arrive at proper rates, one needs to analyze the evidence being presented by all parties and make decisions about the cost study inputs and assumptions. Although he at first stated that the price for a specific unbundled element must be exactly equal to the cost for that element, he later conceded that there might be a range of permissible costs that could support a particular rate. He stated that the process of evaluating that range included decision points that are a result of evaluating the conflicting evidence and deciding what is the most reasonable approach. He conceded that two parties to the rate stipulations could disagree about cost-based rates but still agree on a compromise rate. He objected to what he saw as taking an average of the parties' positions to reach a compromise. He insisted that the process of selecting a rate in the middle of two divergent positions was not a cost-based process.

4. Catherine Petzinger

Ms. Petzinger of AT&T presented testimony regarding SWBT's switching cost studies. Based upon her review and analysis of SWBT cost studies, Ms. Petzinger concluded that SWBT used incorrect inputs and misused the outputs of the Switching Cost Information System to generate the basic switching investments used in its cost study for the minute of use and various port elements. Ms. Petzinger presented her criticisms of the SWBT cost studies and her proposals to rectify those problems.

Incorrect switch prices were used as the foundation for all switching elements

According to Ms. Petzinger, the most critical flaw in the switching studies is SWBT's entry of the incorrect discount input to the SCIS model. The SCIS/MO and SCIS/IN models contain vendor "list" prices and must be modified by a user-entered discount to reflect prices SWBT expects to pay for switches. This percent discount input should be calculated to reflect the long-run replacement switch prices that SWBT expects to pay. Because SWBT is currently in the process of renegotiating new contracts with its switch vendors to obtain better discounts. Ms. Petzinger explained why it would be inappropriate to use the historical contracts (which will shortly - if not already - be outdated) as the bases of computing the switch discount. Instead, Ms. Petzinger recommended, based upon her experience and publicly available information concerning switch prices. For large switches, the "Engineered, Furnished and Installed" (EF&I) price was \$85/line, for medium sized switches, the price was \$115 and for smaller switches, it was \$140 per line.

In contrast, the discount inputs SWBT entered into SCIS produce an average cost per line of \$142. In addition, the \$142 per line is higher than other publicly available information about switch prices as shown below:

Source	Price Per Line
NBI	~\$100
Pacific Bell	\$110
Sprint Inputs to BCPM	~\$120
SWBT Testimony	\$85/115/140
Nortel/US West	~\$68
SWBT UNE Cost Study	**\$142**

Based upon her knowledge and experience of prices currently available in the market, Ms. Petzinger proposed a switch discount of ****78.7%**** for the Lucent switches and ****83.9%**** for the DMS-100. This results in an average price per line of ****\$104****, which does compare favorably to the publicly available information shown above. Given SWBT's current negotiations with Lucent and Nortel, Ms. Petzinger explained it is reasonable to expect its switch prices to decline below these prices. Therefore, using the discount proposed by Ms. Petzinger as a very conservative application, the Commission could certainly justify setting a higher discount.

The primary difference between SWBT's calculated discount inputs and the discounts proposed by Ms. Petzinger results from SWBT's use of a melded new switch price and growth switch price. SWBT has taken an initial switch discount and added growth lines over the alleged life of the switch (9 years) to that discount and determined an average melded discount taking into account the growth lines. SWBT has selectively chosen to include forecasted growth impacts on switch prices, while not including forecasted growth in demand, which would offset the potentially higher prices. The melding methodology conflicts with SWBT's own description of how it performs a switching cost study where it states unequivocally that it sizes the switch "to serve existing demand" - not demand over the life of the switch. Including impacts of growth only where it conveniently increases unbundled element prices is opportunistic and should be rejected. If SWBT has decided to perform full life-cycle costing including both forecasted costs and revenues, they should be required to be consistent and perform these much more complicated studies for all of the unbundled elements.

Feature Hardware Additive

The second major flaw in SWBT cost studies is related to SWBT's development of a feature related hardware additive that substantially inflates the switching minute of use cost. SCIS/MO and SCIS/IN compute trunk investments, which make up 69% of the feature hardware identified by SWBT. SWBT, however, chose not to use SCIS/IN to determine the costs for feature hardware, instead using an undocumented special study which is based upon historical embedded costs which are inappropriate in a forward looking LRIC study. The difference in results

between the special study and using SCIS is substantial. For example, SWBT's feature hardware study showed the cost of a trunk as \$729, whereas SWBT's trunk port study that did use SCIS/IN was \$258. When the SCIS discount input is corrected, the cost per trunk from SWBT's SCIS/IN program for the 5ESS switch is \$157.61.

In addition to using SWBT's own SCIS/MO and SCIS/IN programs to calculate the investments for the feature hardware, Ms. Petzinger also broke the resulting hardware additives down into traffic sensitive and non-traffic sensitive hardware factors. Ms. Petzinger then applied the traffic sensitive additive to the minute of use element and the non traffic sensitive additive to the line port element.

First Cost of Switch

Ms. Petzinger recommend two corrections to SWBT's treatment of the first cost, or Getting Started Investment, of a switch.

- The first cost of the switch, or the Getting Started Cost, that is provided in the Bellcore model needs to be customized to reflect SWBT's local engineering practices. Specifically, she proposed changes to account for SWBT's centralized sparing policy. SCIS comes loaded with a full complement of spare components for each and every switch, assuming that centralized sparing is not available. When centralized sparing is used, then the investment in the components included in the GSI for each host and remote must be reduced. Ms. Petzinger conservatively conclude that the investment for the vender recommended default spare equipment be adjusted by 50%.
- The non-traffic sensitive first cost of switching should be allocated to, and recovered from, the non-traffic sensitive port element rather than the traffic sensitive minute of use element.

Summary

Ms. Petzinger made three major corrections to the SWBT studies:

- Corrected the discount input to SCIS
- Corrected the feature hardware additives
- Reassigned the getting started cost to the line port

The discount corrections impact every switching unbundled element⁹, and all the elements have been recalculated to reflect the correction. This includes the digital trunk ports and tandem switching, as well as the line port and minute of use elements. The feature hardware additive correction and the reassignment of the getting started cost to the line port affect only the line port and local minute of use switching unbundled elements.

It is critical to note that comparing SWBT line port rates to AT&T line port rates separately from the minute of use rates can be misleading. While it

⁹ Except the ISDN port element investments, which AT&T did not modify.

may appear that the port rates proposed by AT&T and those proposed by SWBT are not materially different, the Commission should bear in mind that we have reassigned the large getting started switching investment from the minute of use element to the port element.¹⁰ This reassignment resulted in substantially increasing the port and reducing the minute of use. Thus, if the Commission is inclined to make any adjustments to the proposals made by AT&T, Ms. Petzinger urged the Commission to consider adjustments to the switch minute of use investments in tandem with adjustments to the port investments.

Although AT&T strongly urges that new switch pricing should be used, if the Commission decide to meld new and growth prices, then Ms. Petzinger also testified about the adjustments to SWBT's cost studies being proposed by Staff witnesses. Staff's proposed discount input adjustments generate a huge disparity in costs between the two switch technologies, which is inappropriate because the switch vendors are highly competitive in pricing equivalent switch technologies. Ms. Petzinger therefore recommend that the most cost-effective switch technology be used as the benchmark price of switching. The SCIS discount input for the other switch technology would be determined by iteratively running SCIS until the SCIS outputs match the benchmark. Ms. Petzinger also recommend that the 3% discount increase proposed by Staff for growth equipment also be applied to new switch equipment.

Staff proposed accepting SWBT's life-cycle costing methodology with modifications. Ms. Petzinger explained that the Staff's modifications need to be enhanced. Staff recommended using a melded investment of new and growth switch pricing over the life of the switch, but staff recommended "growing" the minute of use demand only over the life of the arbitration agreement. The time periods must match and therefore the minute of use demand should also be grown over the life of the switch. In addition, the number of ports must be "grown" as well as minute of use demand. Ms. Petzinger agreed with Staff's recommendation that the percentage of new vs. growth lines should be calculated by including the effects of timing the purchasing of lines based on cost optimization.

Although Staff agreed with AT&T that the getting started investment is more non-traffic sensitive, Ms. Petzinger disagreed with Staff's conclusion to not make any changes. AT&T's position is that an additional switch will be required when the number of lines exceed the capacity of the first switch. Therefore, there is a direct cost-causation relationship between lines and the getting started cost of a switch and accordingly, the getting started investment should be assigned to, and recovered by, the port element, rather than the minute of use element.

Ms. Petzinger responded to Staff's concern that AT&T did not adequately support our assertions that SWBT's feature hardware costs are seriously overstated. The differences between SWBT's two cost studies are so large that

¹⁰ The primary reason for the similar port element costs, despite our inclusion of the large getting started investment, is the discount input and feature hardware additive corrections.

it is obvious one of them is wrong. As an example, the trunk costs in SWBT's feature trunk hardware study, which represent 70% of the costs in question, are more than three times higher than the trunk equipment in SWBT's trunk port study. Ms. Petzinger explained that she did not arbitrarily choose the least-cost cost study; rather, she determined that the appropriate cost is the one generated by the same cost models that SWBT used for every other switching cost used in these studies. She also explain why the separate feature hardware study methodology SWBT used could generate radically different costs than the SCIS programs used by SWBT for all of the other costs in the switching cost studies. It is essential that the feature hardware costs be recalculated using SWBT's own SCIS programs.

Finally, Ms. Petzinger reviewed the portion of the rates contained in the proposed settlement between SWBT, Cox and Staff relating to Switching (the "Proposed Settlement Rates"). The proposed settlement rates do not represent cost based rates which satisfy either the Oklahoma costing rules (OAC 165:55-17-25 and OAC 165:55-17-27) or the relevant provisions of the Telecommunications Act of 1996. The proposed settlement rates do not incorporate all of the changes which are necessary in order to render SWBT's cost studies compliant with the Act and the Oklahoma costing rules as outlined in my testimony. Indeed, the proposed settlement rates do not even incorporate or represent the changes and recommendations of Commission Staff consultants and, therefore, cannot be cost-based in my opinion even based upon the recommendations of Staff's own consultant. Ms. Petzinger urged the Commission not to adopt these rates.

Summary of Cross-Examination of Catherine Petzinger

The ALJ questioned Ms. Petzinger concerning the wide range of cost data that had been presented by the various parties in the cause, and particularly the underlying wide differences of opinion concerning that data. He specifically asked about what made the stipulated rates less reasonable or less cost-based than those presented by any specific party. The witness responded that the disparity was based on the different inputs used in the assumptions of the respective parties. She also offered the opinion that the stipulated rates would be more favorable to Cox than to AT&T because Cox's facilities are primarily in downtown business areas.

On cross-examination by Cox, Ms. Petzinger admitted that she was unfamiliar with Cox's facilities and that she didn't really know what facilities Cox maintained or how they were deployed. The witness further stated that she was unfamiliar with Cox's business plan for future competition.

Cox next questioned Ms. Petzinger concerning her conclusion that the rates in the stipulation are not cost-based. She stated that AT&T's proposed rates were cost-based and that SWBT's were not. She indicated that AT&T would accept only minor differences from their proposed rates and that rates that diverged dramatically from the AT&T proposals should not be considered cost-based according to the Oklahoma cost rules.

Ms. Petzinger admitted that AT&T uses at least two different cost models, both of which resulted in what AT&T believes to be cost-based rates. She also admitted that different inputs into cost models can produce different costs.

On cross-examination by SWBT, Ms. Petzinger was unable to justify her conclusion that the stipulated rates were not in compliance with the Telecommunications Act nor with the Oklahoma pricing rules. She expressed unfamiliarity with the standards by which the stipulated rates should be judged and admitted that she was relying on information provided her by Mr. Flappan, another AT&T witness. She could not say whether a reasonable rate for unbundled network elements might include a reasonable profit. She did admit that the ALJ should be able to review different efficient technologies and evaluate the logical arguments proposed by the various parties in this proceeding to try to determine what would be the forward-looking technology based on the issues raised and the testimony submitted in the hearing.

5. Daniel F. Rhinehart

Mr. Rhinehart is a District Manager - Government Affairs with AT&T. He holds BS and MBA degrees and has performed analysis of telecommunications costs since 1980. He demonstrated that the SWBT cost methods and inputs are flawed in many respects, frequently resulting in over-recovery or double recovery of costs by SWBT in its cost studies.

Mr. Rhinehart sponsored the restatement of SWBT's cost factors to correct them for errors in inputs or computations. He used the BELLCORE CAPCOST model used by SWBT to determine capital cost factors of depreciation, cost of money and taxes. Mr. Rhinehart's CAPCOST inputs are based on depreciation parameters which, in SWBT's words, are "prescribed by the OCC." These parameters originated in June, 1997 annual depreciation update negotiations between the OCC staff, FCC staff, and SWBT. He based his capital cost factors on a proposed AT&T-SWBT stipulation rate of return of 10.0%.

Mr. Rhinehart analyzed SWBT Support Asset Factors and concluded that SWBT's inclusion of support asset costs, such as land, buildings, general purpose computers, and motor vehicles, in both labor rates and recurring cost studies lead to significant double recovery of costs in some instances. He proposed that loaded labor rates for certain groups of employees exclude support asset costs because appropriate recovery of these costs is included in recurring cost studies and should not be double-recovered through labor-rate based non-recurring charges. He also identified instances where SWBT's cost studies include specific support asset costs (e.g., general purpose computers) while the generalized support assets factors include these costs as well. A downward adjustment should be made to the support assets factors. The alternative is to eliminate the double-counted computers from their specific cost studies.

Mr. Rhinehart demonstrated, and SWBT has agreed, that the equipment maintenance factors developed by SWBT incorporate SWBT's embedded customer-generated non-recurring service order activity. To avoid including SWBT's internal non-recurring costs in LRIC recurring rates for unbundled elements, he proposed a downward adjustment to SWBT's maintenance factors based on independent analyses. He also proposed a small downward adjustment to SWBT's proposed equipment maintenance factors to account for the lesser amount of testing expense expected in the future as former SWBT functions are assumed by new entrants on behalf of their customers. Finally, because SWBT did not support its proposed